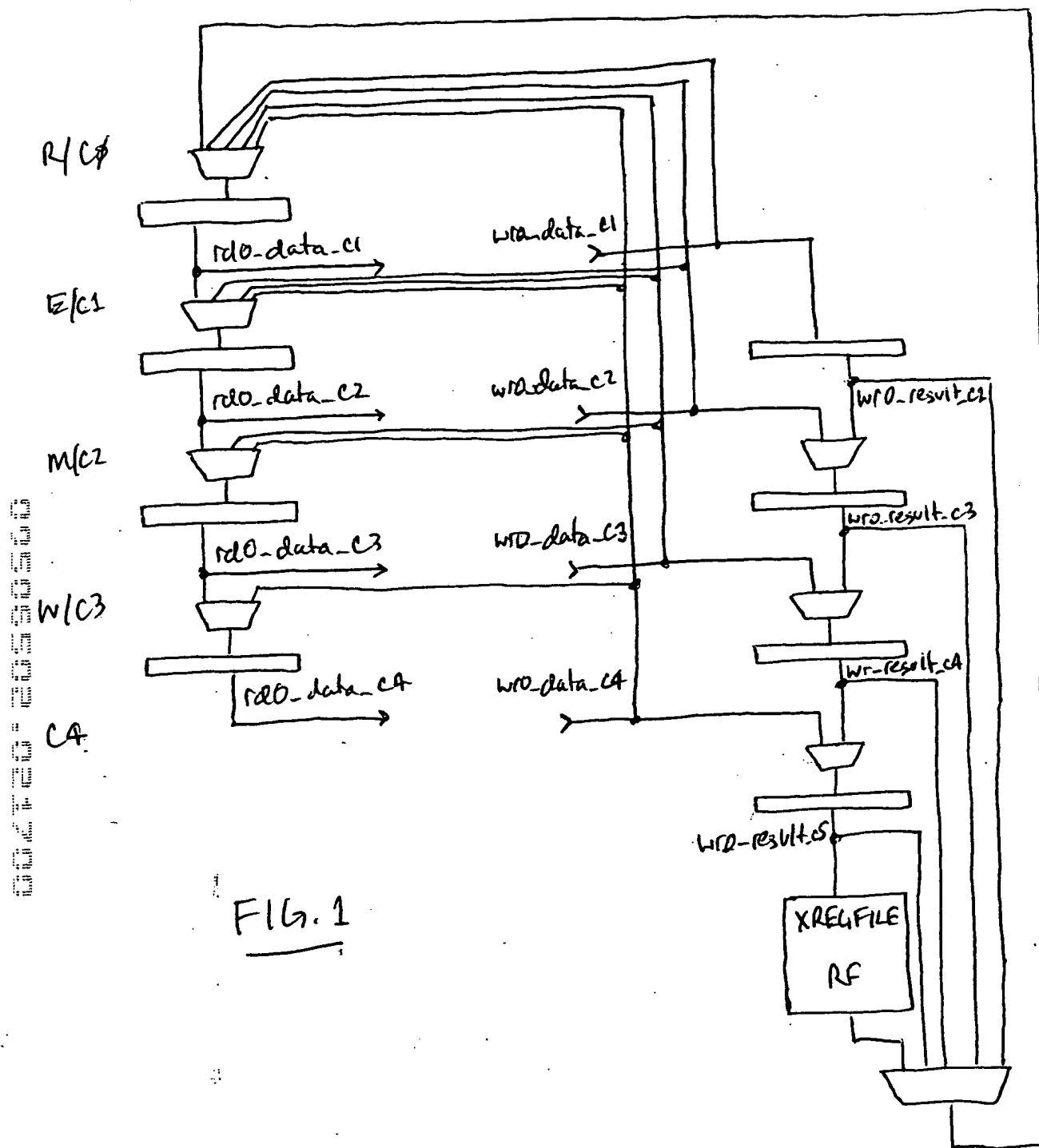


READ PORT/PIPE

WRITE PORT/PIPE



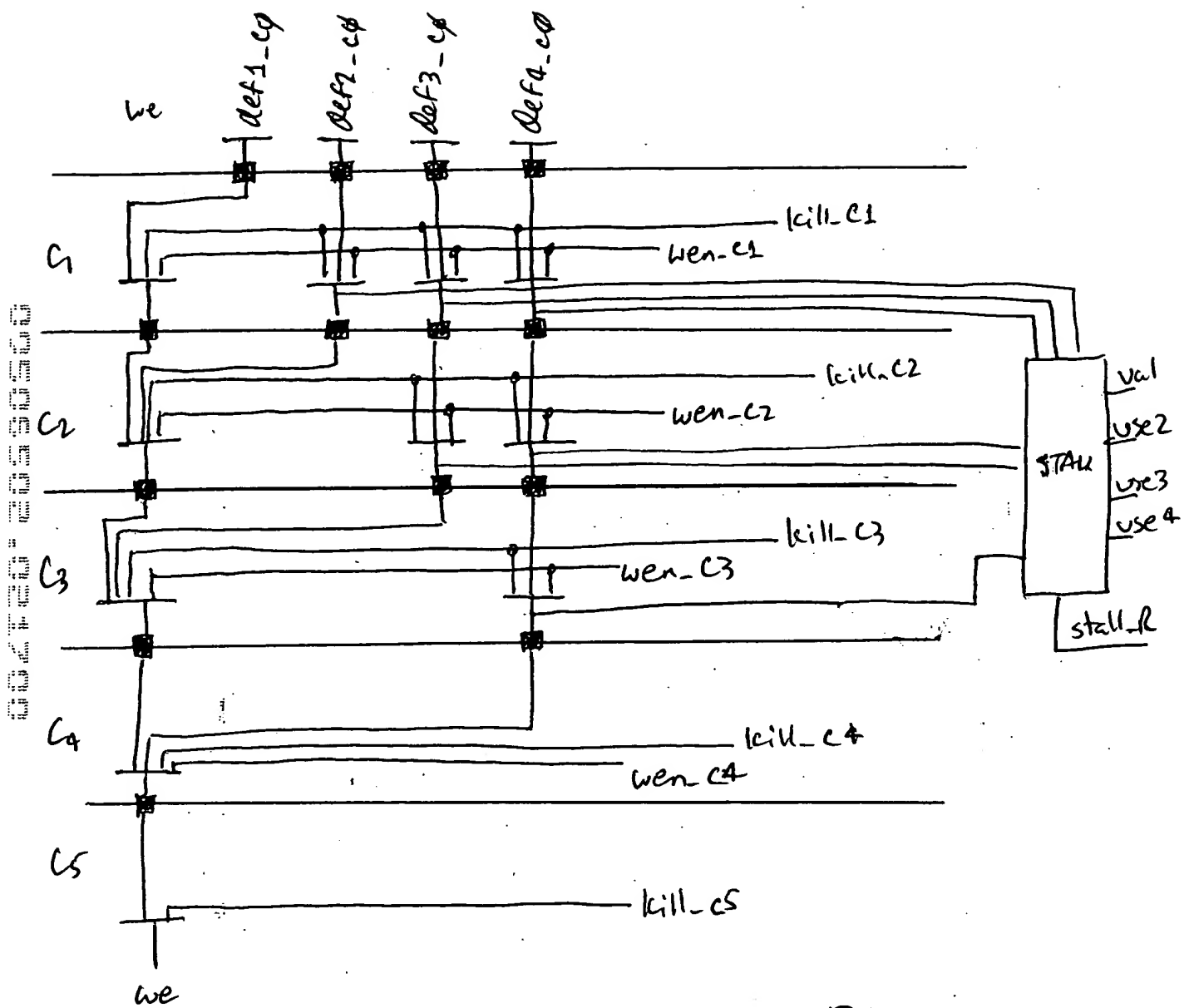
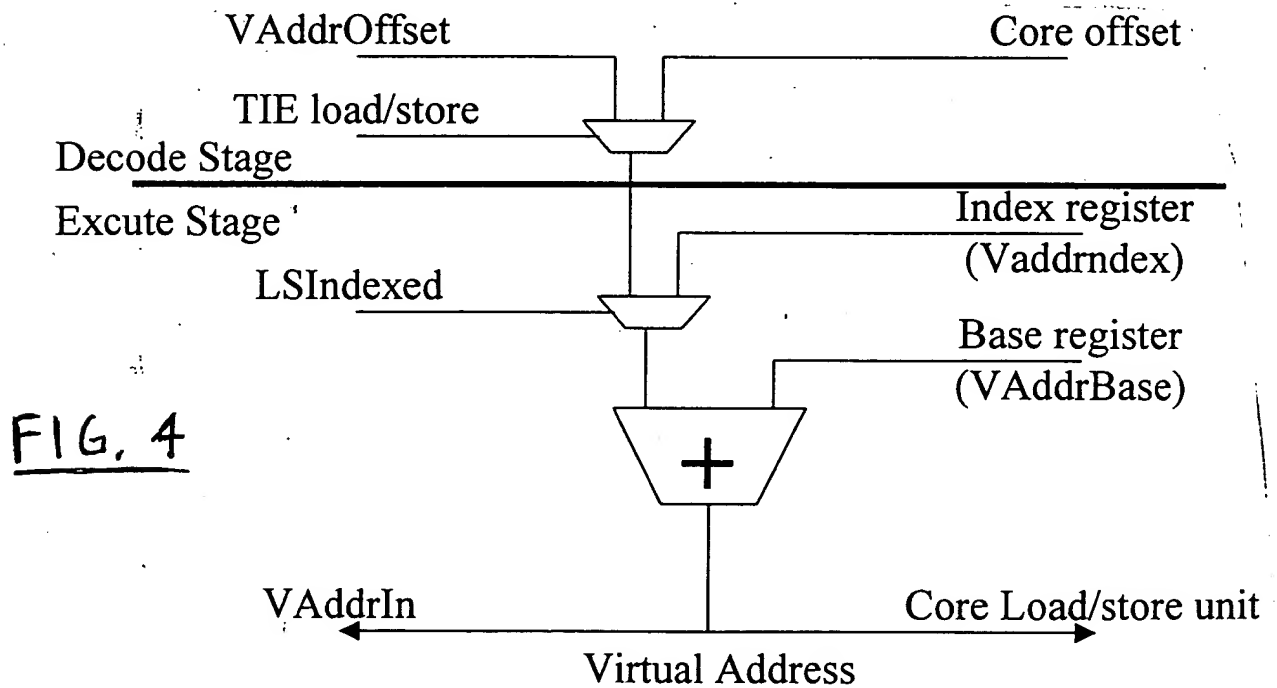
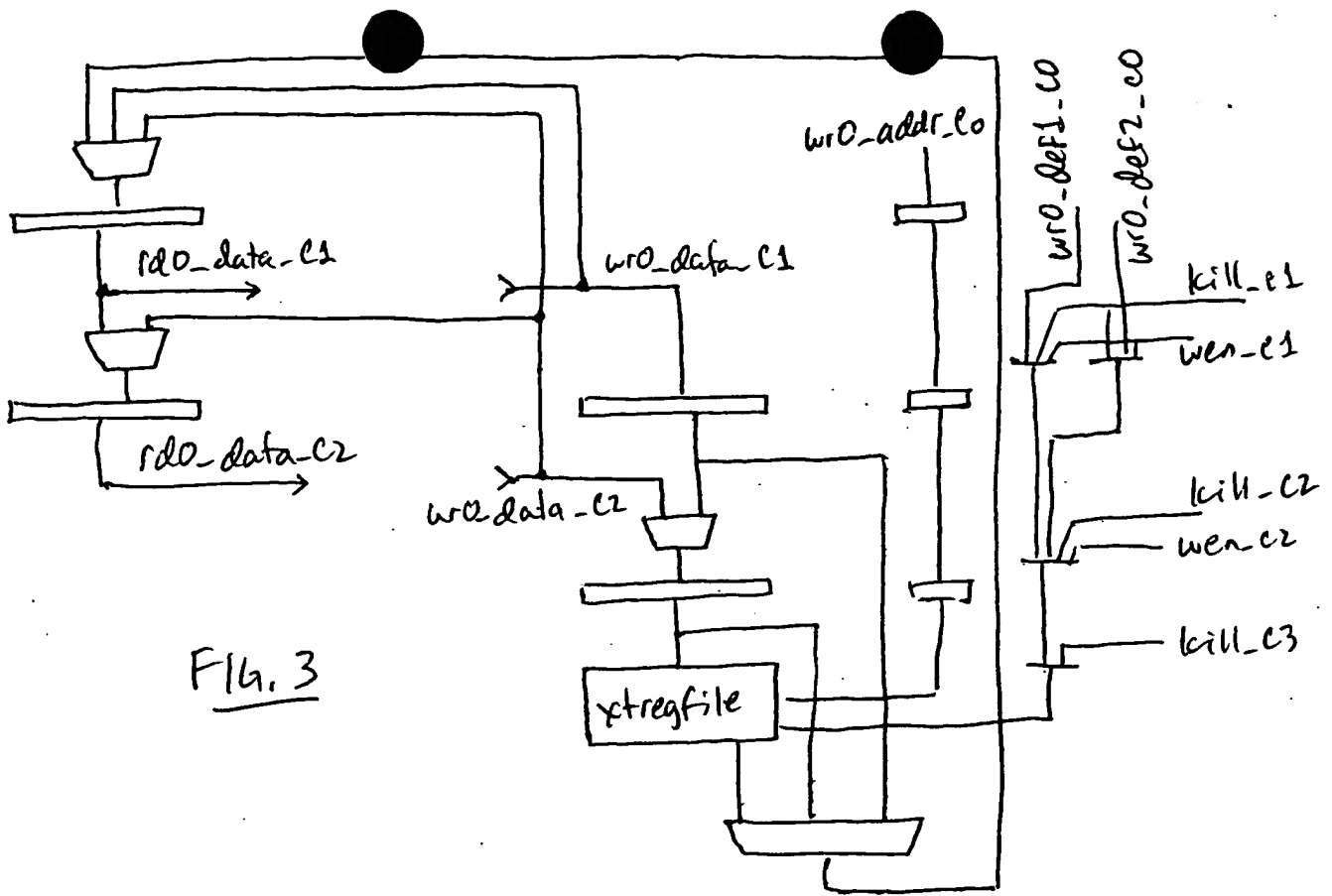


FIG. 2



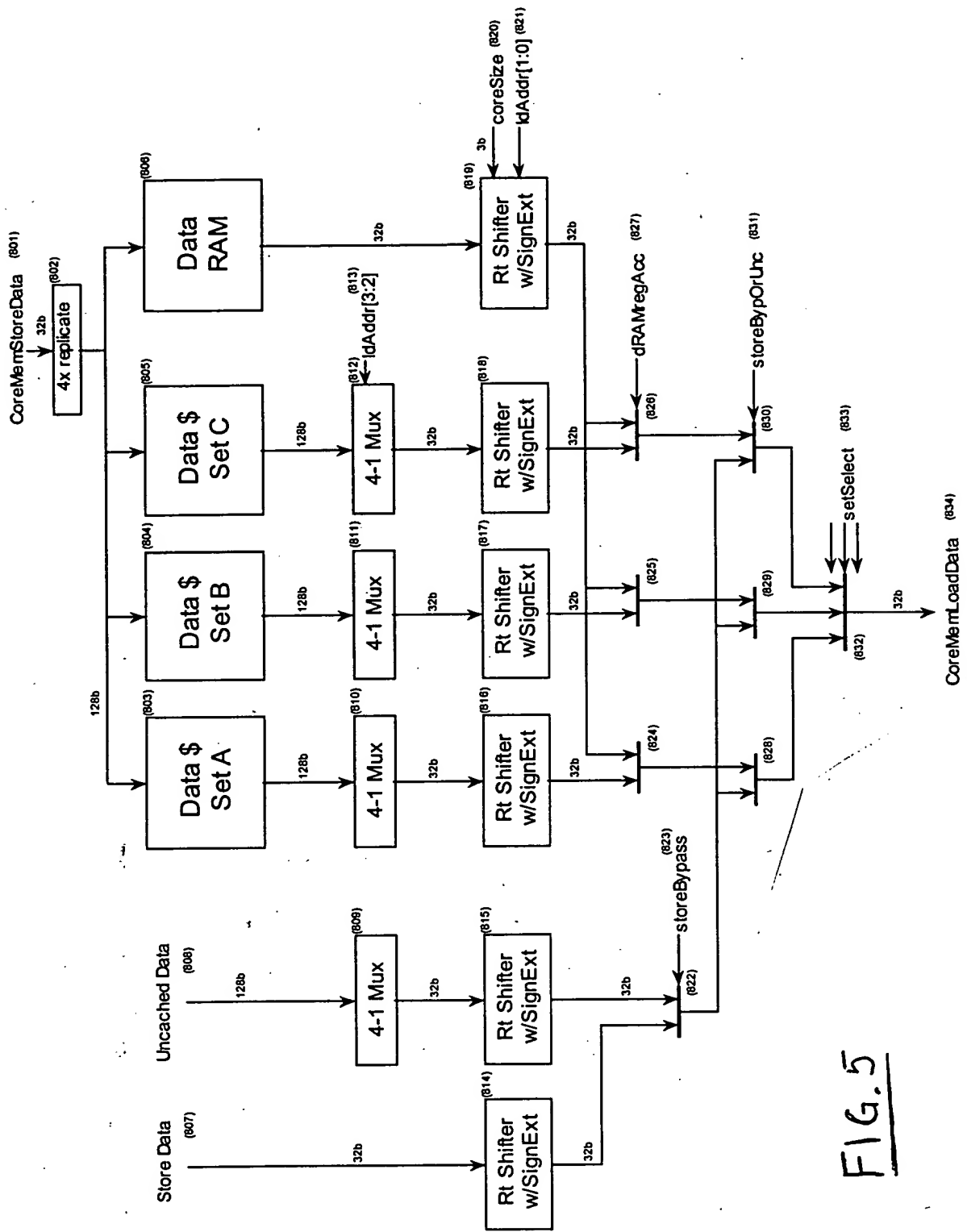


FIG. 5

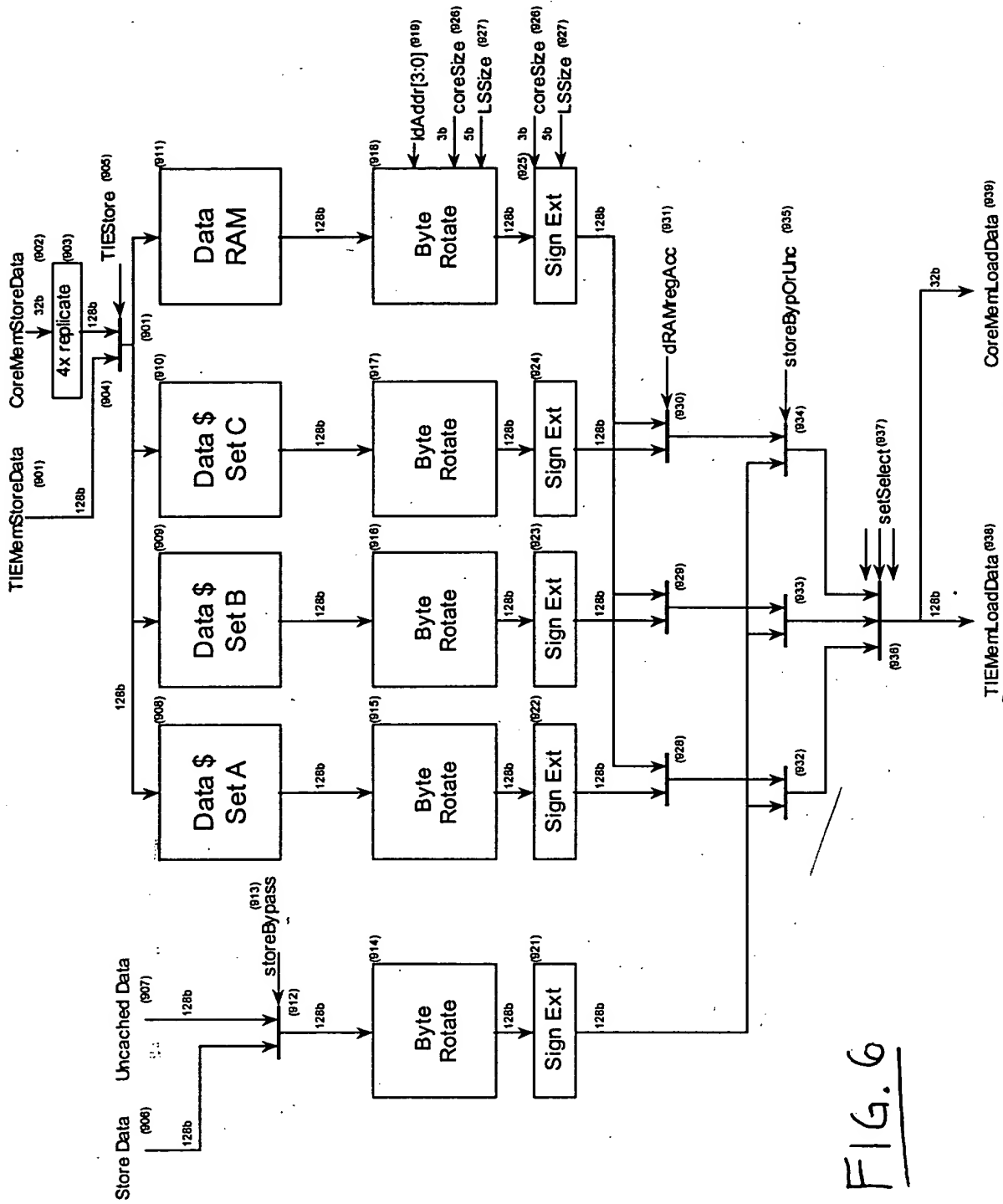


FIG. 6

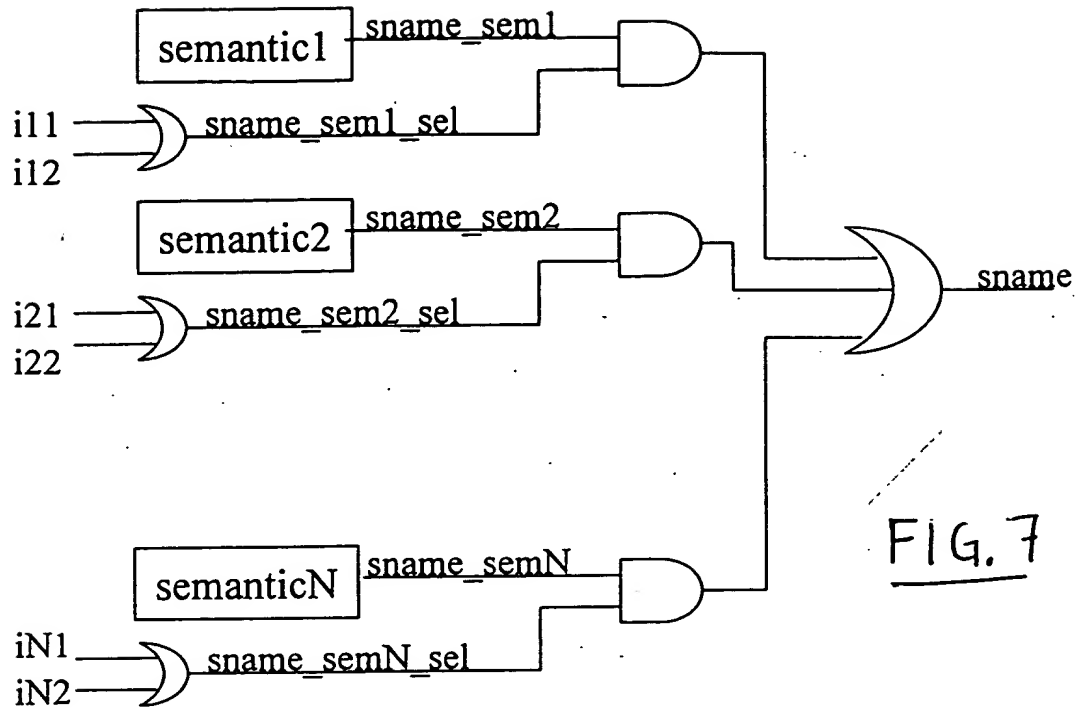


FIG. 7

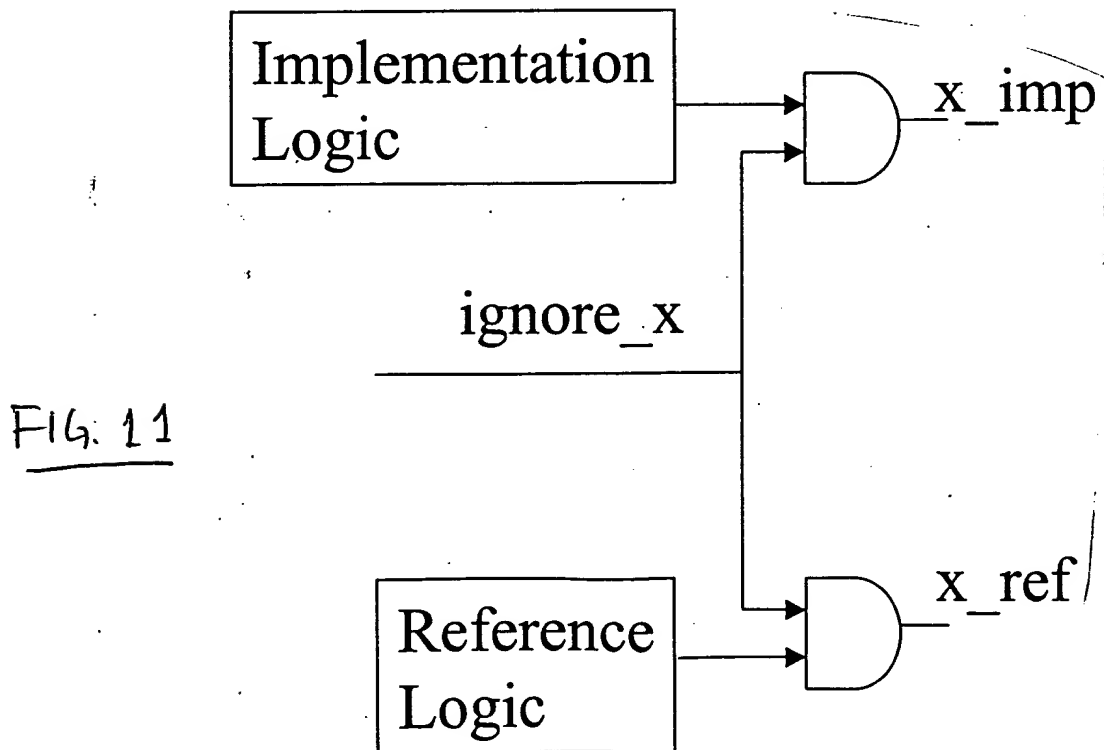
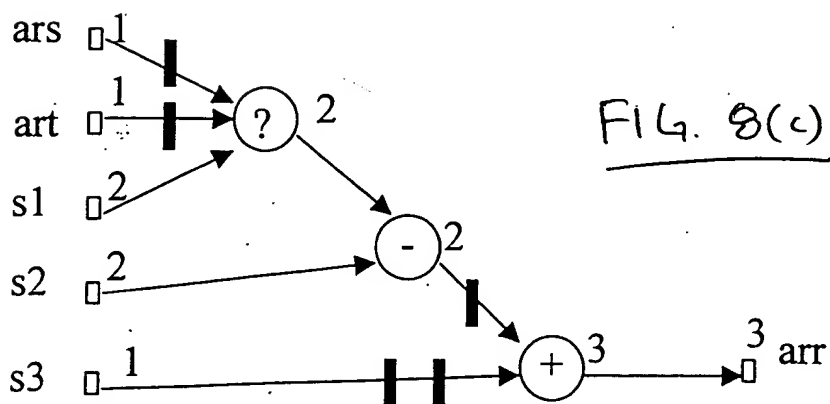
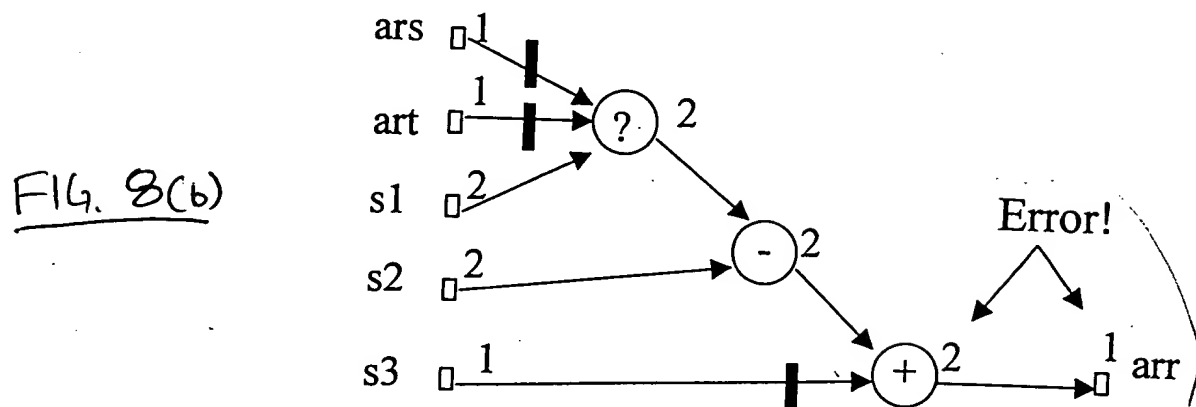
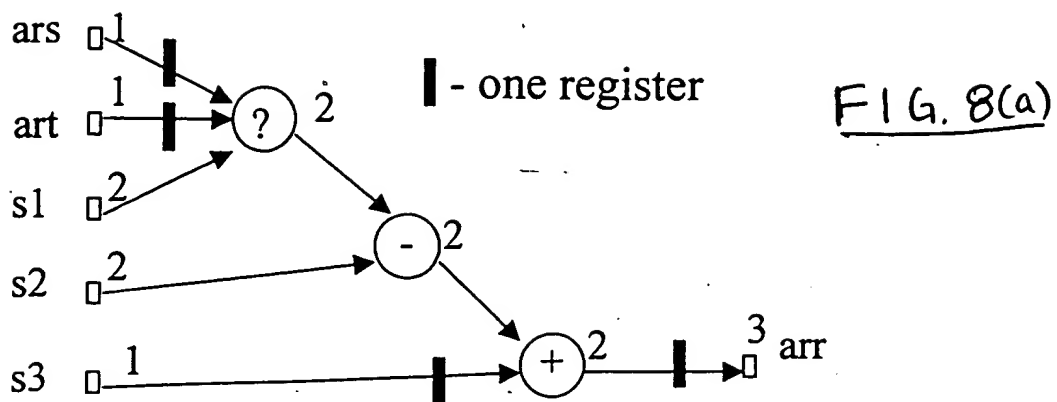


FIG. 11



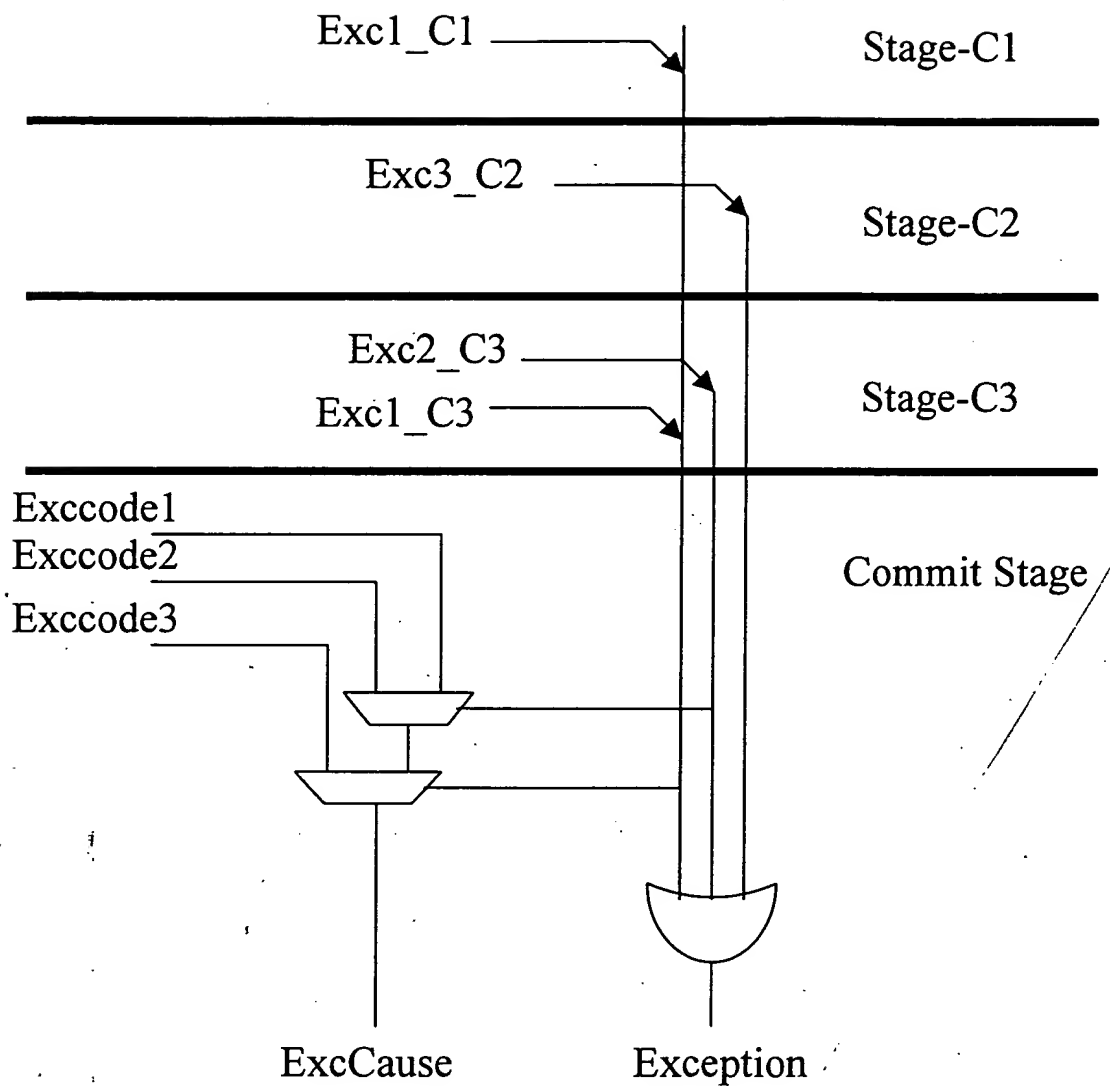


FIG. 9



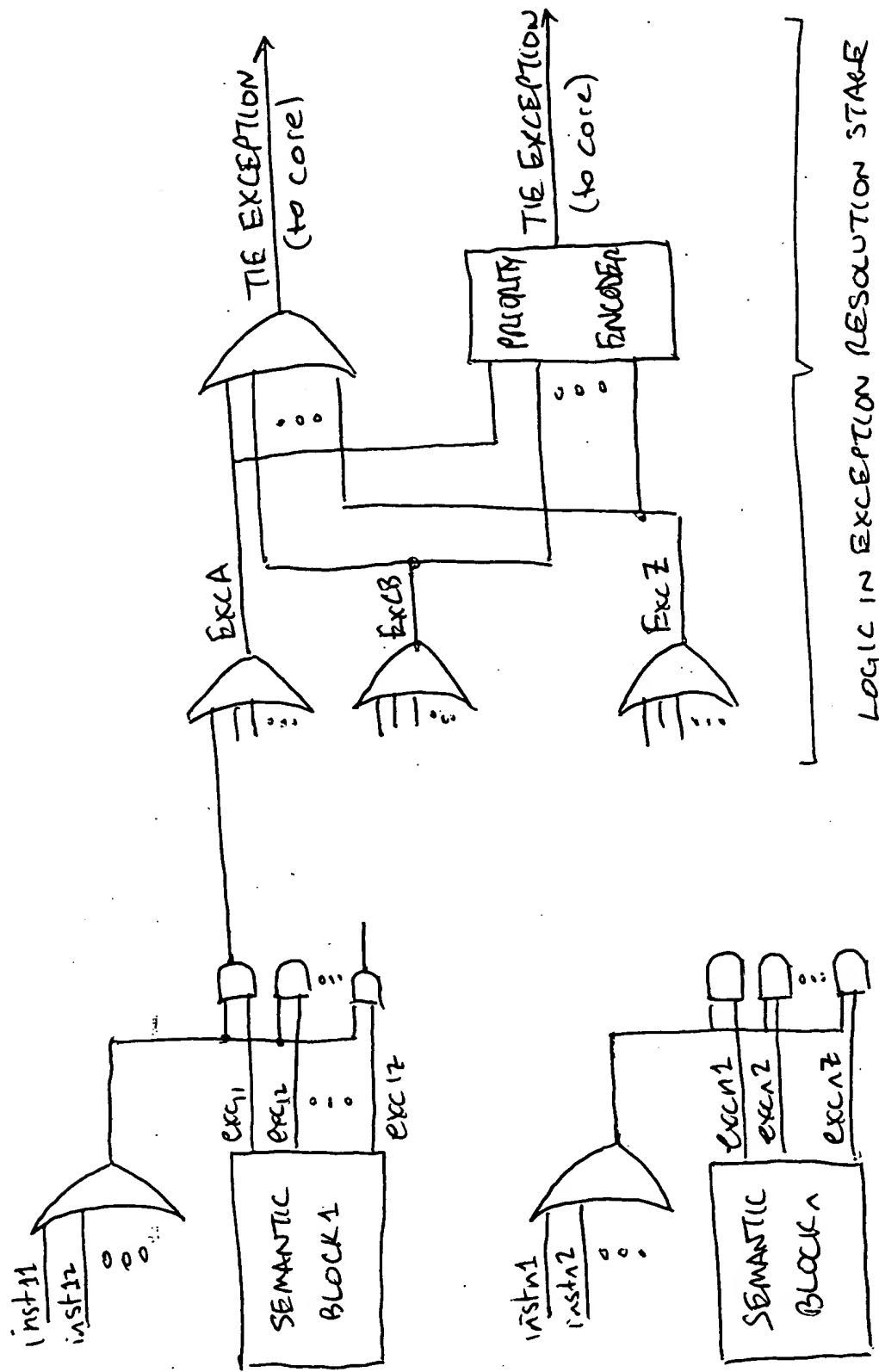
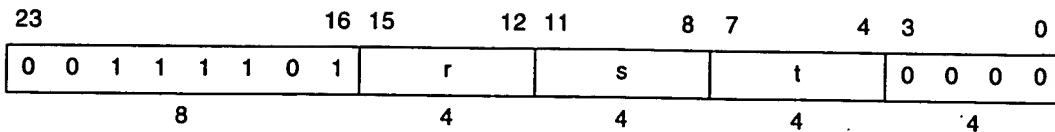


FIG. 10

## MAX40

## 4 Parallel 40-bit Maximum

### Instruction Word



### Package

Vector Integer Coprocessor

### Assembler Syntax

MAX40 vr, vs, vt

### Description

MAX40 calculates the 40-bit two's complement maximum value for each of the 4 elements of vector registers vs and vt. The result elements are written to vector register vr.

### Operation

```
vr = (((~vs[159], vs[158:120])) < ((~vt[159], vt[158:120]))) ?  
vt[159:120] : vs[159:120], (((~vs[119], vs[118:80])) < ((~vt[119],  
vt[118:80]))) ? vt[119:80] : vs[119:80], (((~vs[79], vs[78:40])) <  
((~vt[79], vt[78:40]))) ? vt[79:40] : vs[79:40], (((~vs[39],  
vs[38:0])) < ((~vt[39], vt[38:0]))) ? vt[39:0] : vs[39:0];
```

### Exceptions

None

Fig. 12

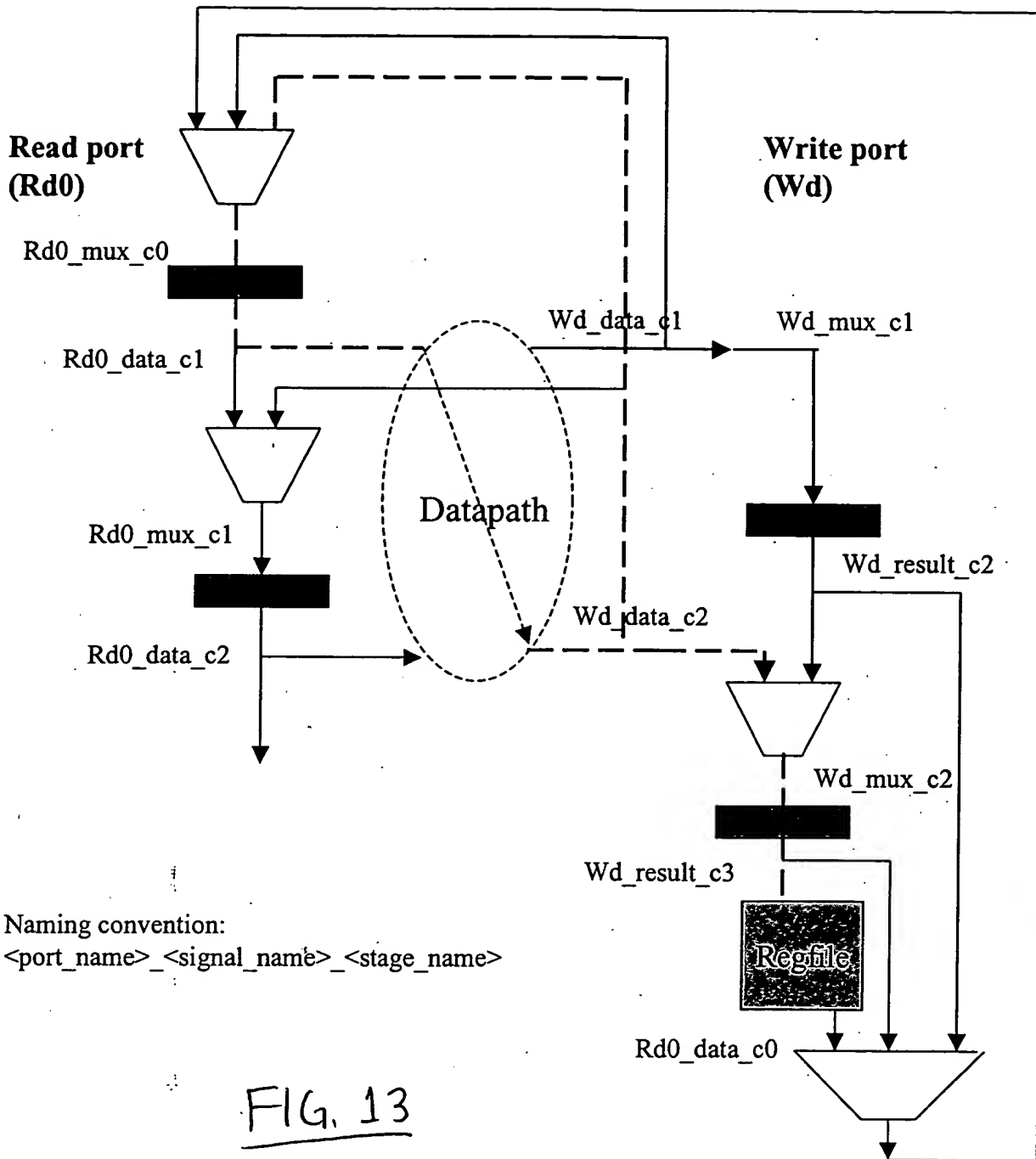


FIG. 13

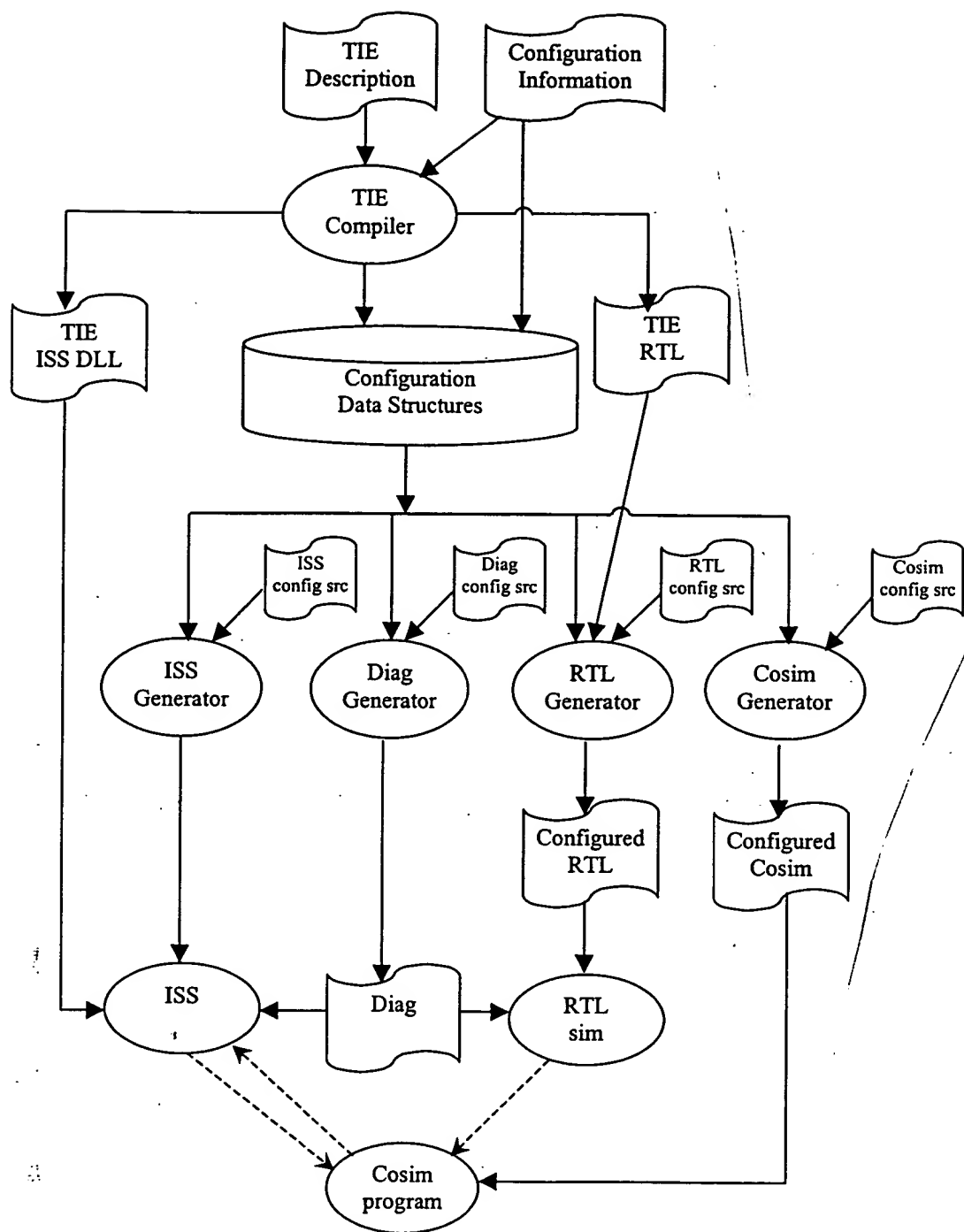


FIG. 14